



Resource Center

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Technical Service Team Leader
for Geotechnical and Hydraulics
Federal Highway Administration
Baltimore, Maryland



U.S. Department
of Transportation

**Federal Highway
Administration**

The FHWA Resource Center

Atlanta - Baltimore – Olympia Fields - San Francisco



Resource Center Vision

To be the best at deploying
transportation technologies.



Resource Center Mission

To advance the use of
transportation technologies
through training and technical
assistance.



Resource Center

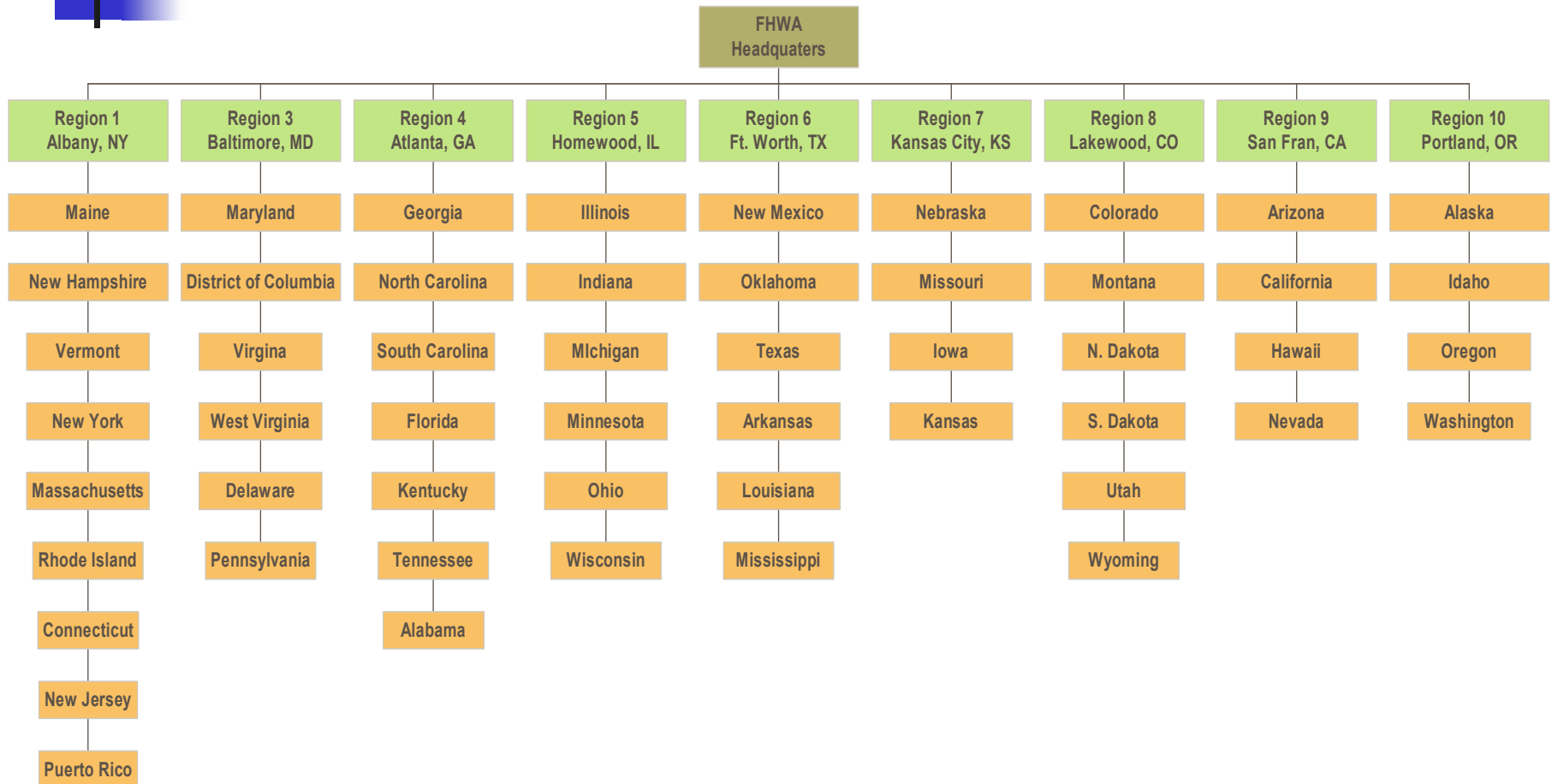
Provides:

- Technical Assistance,
- Training, and
- Technology Deployment

No Program Authority
No Project Approval

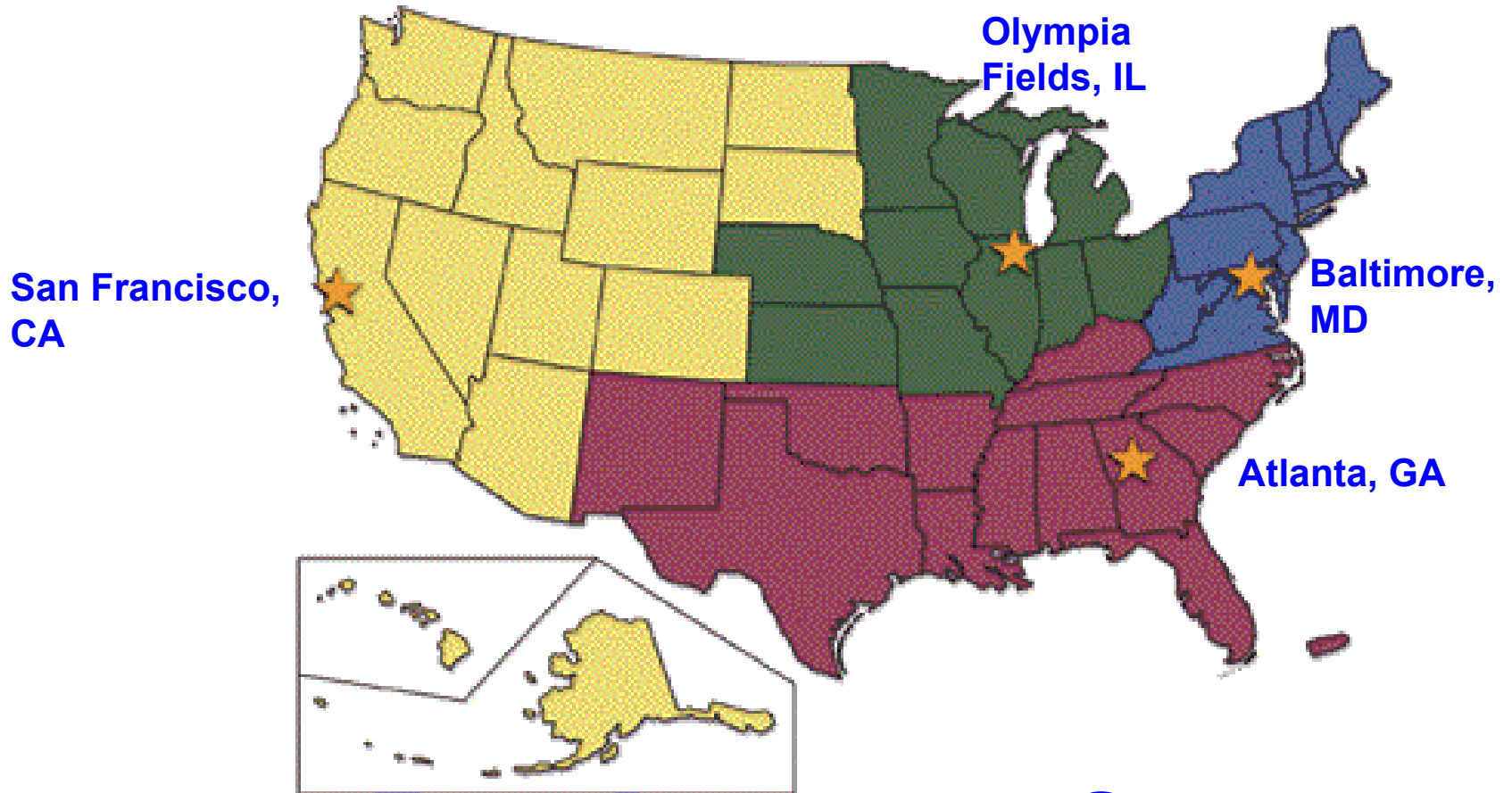


FHWA - pre-restructuring, Sept. 98



1998

Serving our primary customers –



Four Resource Centers –
Four Locations

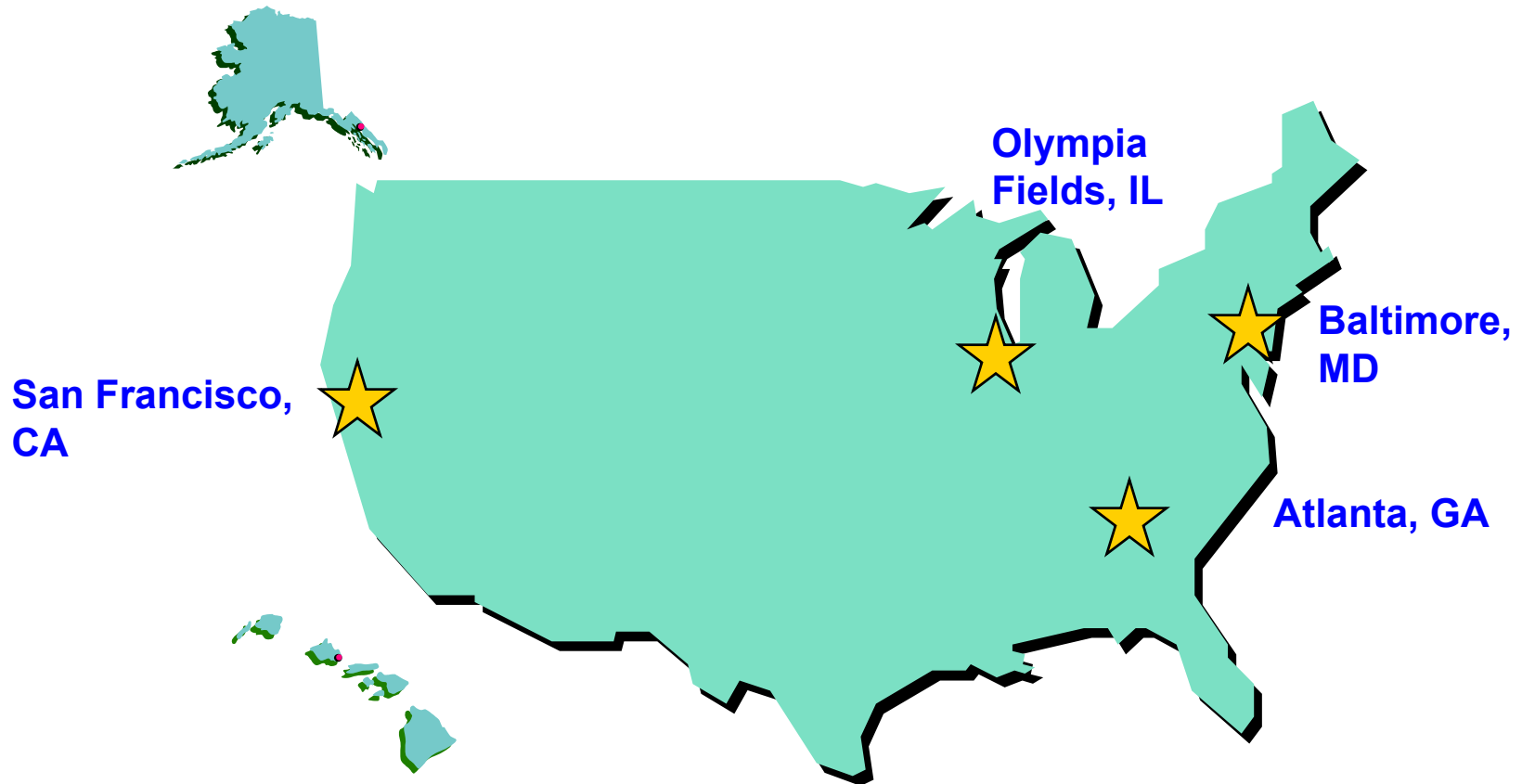


Restructuring Assessment of Customer Service: 2001-02

- 200 focus groups with state DOTs
- 138 listening sessions with FHWA employees
- 422 in-depth interviews with industry leaders

2003:

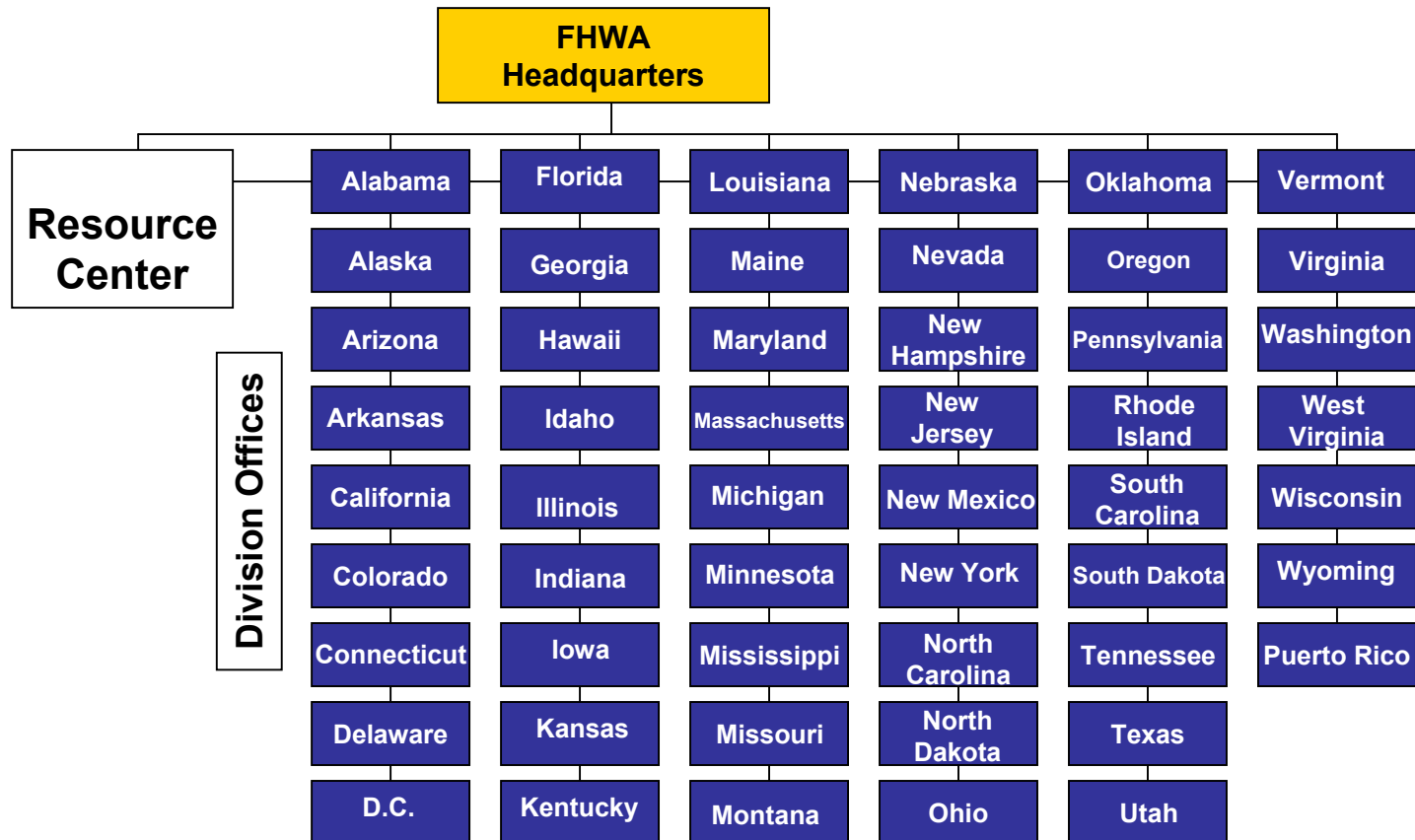
Serving customers nationwide --



One Resource Center –
Four Locations

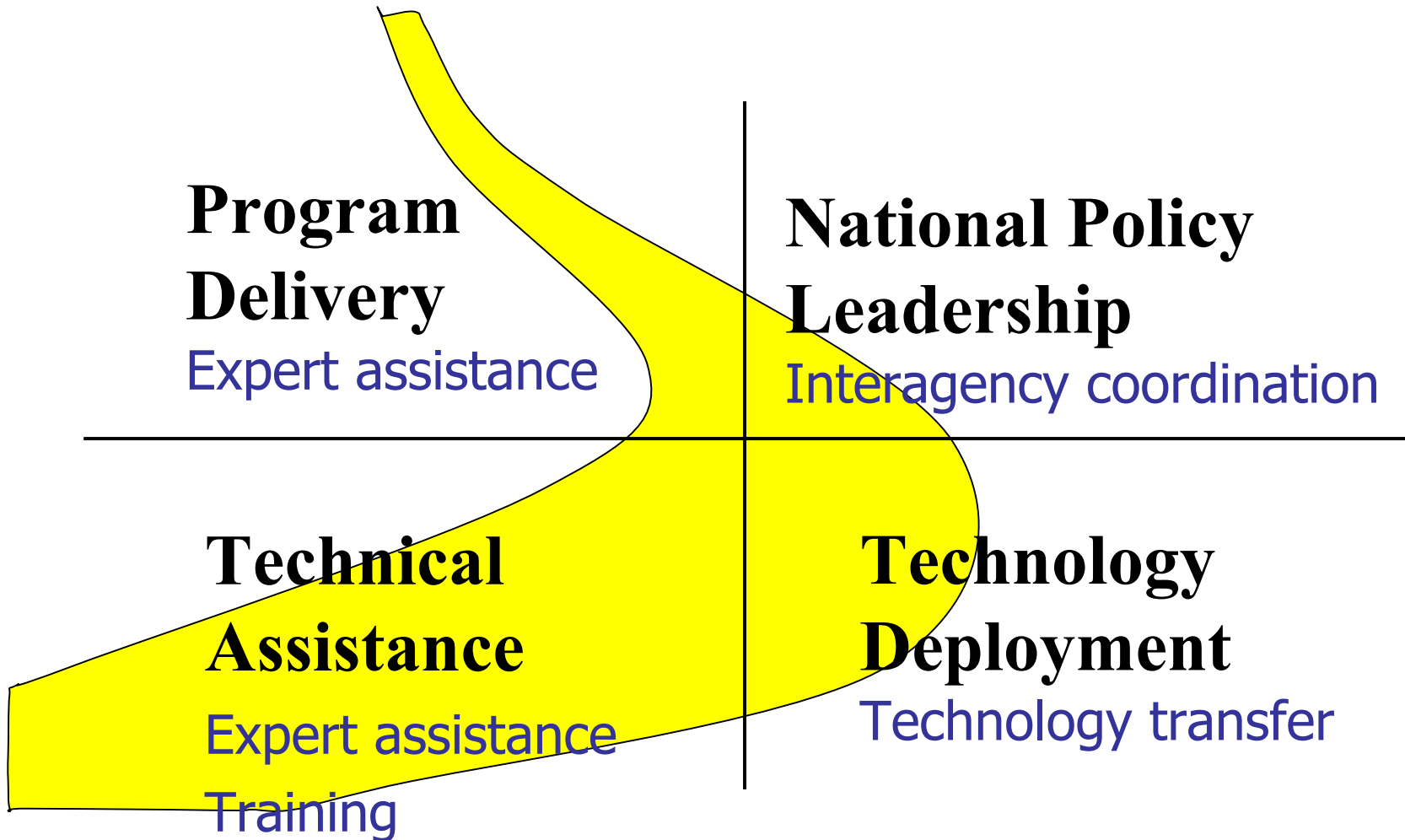


FHWA – Now



FHWA Key Processes

Resource Center Subprocesses





FHWA Key Processes

Resource Center Subprocesses

- Program Delivery
 - ***Expert assistance***
- National Policy Leadership
 - ***Interagency coordination***
- Technical Assistance
 - ***Expert assistance***
 - ***Training***
- Technology Deployment
 - ***Technology transfer***



Resource Center Functions

- Program Delivery
 - Expert assistance
- National Policy Leadership
 - Interagency coordination
- Technical Assistance
 - Expert assistance
 - Training
- Technology Deployment
 - Technology transfer



Our Working Relationships

- Division Offices
- FHWA Headquarters
- Federal Lands Offices
- Turner Fairbanks HRC
- State DOTs
- Metropolitan Planning Organizations (MPOs)
- Federal Agencies
- LTAP Centers
- Local Agencies
- Industry & Associations
- General Public



Technical Service Teams

- Air Quality
- Civil Rights
- Construction & Project Management
- Environment
- Finance
- Geotech & Hydraulics
- Operations
- Pavements & Materials
- Planning
- Safety & Highway Design
- Structures

Technical Service Team Groupings

*San
Francisco*

Environment

Planning

Air Quality

**Construction
& Project Mgmt
Pavements
& Materials
Finance**

Atlanta

Baltimore

**Geotech &
Hydraulics**

Structures

**Safety & Highway
Design**

Operations

*Olympia
Fields*

Civil Rights

To Be Assigned



Geotech & Hydraulics Team

- Baltimore

- Geotech engineering
- Soil slopes & embankments
- Bridge scour
- Culvert analysis/design
- Hydraulics & hydrology



Geotech & Hydraulics Team

Available Training

- Pile Design & Construction
- Bridge Backwater Basics
- Deep Foundation Design
- Hydrology Overview
- Tidal Hydraulics Workshop
- Culvert Overview



Geotechnical and Hydraulics

Peter W. Osborn, Team Leader

■ Hydraulics Engineers

- Larry Arneson, CO
- Dan Ghere, IL
- Joseph Krolak, MD
- Cynthia Nurmi, GA

■ Geotech Engineers

- Barry Berkovitz, GA
- Chris Dumas, MD
- Sam Mansukhani, IL
- Silas Nichols, MD
- Ben Rivers, GA
- Barry Siel, CO



Structures Team

- Baltimore

- Bridge management/
NBIS
- Structural design
- Complex structures
- Finite element modeling
- Cargo tank issues
- High performance
structural materials
- Jointless bridges
- Tunnel Management
System



Structures Team

Available Training

- Bridge Maintenance
- Engineering Concepts for Inspectors
- Composite Bridge Technology
- Finite Element Analysis
- Introduction to Tunneling Engineering



Construction & Project Management Team - Atlanta

- Innovative Contracting expertise
- Incentive Programs
- Design-Build
- A+B Construction



Const & Project Mgmt Team

Available Training

- Contract Administration Core Curriculum Course
- Innovations & Advancements Workshop
- Principles of Writing Highway Construction Specifications
- Value Engineering Workshop
- Highway/Utilities Issues



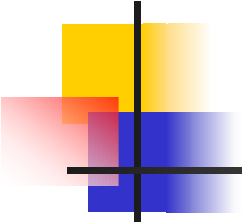
Const & Project Mgmt Team

Available Training (Continued)

- Quality Assurance
- Use of Critical Path Method (CPM) for Estimating, Scheduling, and Timely Completion
- Design and Implementation of Erosion and Sediment Control

Pavements & Materials Team

- Atlanta

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- Materials & QC/QA
 - Pavement Smoothness
 - AASHTO Design Guide
 - Knowledge Building
 - LTPP
 - Technical Training & Certification (WAQTC)
 - Superpave
 - HIPERPAV Software for PCCP Analysis
 - Pavement Management Systems
 - Life Cycle Cost Analysis
 - Regional Quality Initiatives

Pavements & Materials Team

Available Training

- Highway Materials Engineering
- Hot-Mix Asphalt Materials, Characteristics and Control
- Portland Cement Concrete Materials
- Pavement Subsurface Drainage Design
- AASHTO Pavement Overlay Design
- Introduction to Mechanistic Design - New & Rehabilitated Pavements



Finance Team

- Atlanta

- Financial Management Initiatives
- Financial technique briefings
- AASHTO Audit Liaison
- Accounting & auditing systems management
- Project financing assistance

Pavements & Materials Team

Available Training (Continued)

- Pavement Smoothness: Use of Inertial Profiler Measurements for Construction Quality Control
- Hot-Mix Asphalt Facilities
- Hot-Mix Asphalt Construction
- Hot-Mix Asphalt Pavement Evaluation & Rehabilitation
- Asphalt Pavement Recycling Technologies
- Concrete Pavement Design Details & Construction Practices

Pavements & Materials Team

Available Training (Continued)

- Construction of Portland Cement Concrete Pavements
- Portland Cement Concrete Pavement Evaluation and Rehabilitation
- Pavement Preservation: The Preventive Maintenance Concept
- Pavement Preservation: Selecting Pavements for Preservation
- Analysis of PMS Data for Engineering Applications
- Life-Cycle Cost Analysis



Safety & Highway Design Team - Olympia Fields

- Geometric design
- Safety engineering
- NHTSA liaisons
- Older driver issues
- HSIP
- Pedestrian/bike safety
- Roadside design
- Context sensitive design
- MUTCD 2000
- Work zones
- Red light running
- Safety outreach programs
- Retroreflectivity
- Traffic calming
- Section 402



Operations Team

- Olympia Fields

- ITS program, architecture & rural issues
- Incident management
- Freeway management
- CORSIM
- Emergency preparedness



Environment Team

- San Francisco

- Environmental program
- Biology/water quality
- Biology resources
- Environmental streamlining
- Environmental Justice
- NEPA/404 coordination
- Flexible mitigation techniques
- Section 106
- Section 4(f)
- Endangered Species



Planning Team

- San Francisco

- Intermodal & statewide planning
- NAFTA planning
- Highway finance
- Metropolitan planning
- Environmental justice
- STIPs/TIPs
- Long-Range Plans
- Congestion management



Air Quality Team

- San Francisco

- Air quality
- Air quality policy issues
- Conformity
- CMAQ program
- AQ modeling
- Clean Air Act provisions



Civil Rights Team

- Location to be determined

- Complaint investigation
- Contract compliance
- Americans with Disabilities Act (ADA)
- Title VI
- Garrett A. Morgan initiatives
- Environmental justice
- Disadvantaged Business Enterprises (DBE)



Other Resource Center Staff

- Expertise in every location

- Administrative Staff
- Communications/Media
- Information Analysis
- Marketing
- Strategic Planning/Quality Journey
- Technology and Innovation Deployment



Communications/Media

- Media Training
- Reporter relations
- Writing
- Media events
- Outreach
- Effective communication training
- Presentation Skills
- Editing
- News conferences
- Speechwriting
- Interpersonal communications



Information Analysis

- Statistical analysis
- Survey research & design
- Performance metrics
- Performance measures
- Program evaluation
- Regression modeling
- Data quality
- Quality Improvement Process design
- Customer surveys
- Customer focus
- Organizational assessments



Marketing

- Marketing training
- Market research
- Marketing plans
- Marketing tools
(brochures, exhibits,
videos, CD-ROMs)
- Special event
planning &
coordination
- Customer relationship
management
- Graphic design
contracting



Strategic Planning/ Quality Journey

- Strategic & performance planning
- Organizational design & effectiveness
- Performance management
- Performance improvement techniques
- Quality improvement applications



Technology & Innovation Deployment

- Emerging Technology
- Market Ready Technology
- Innovations
- Research Results
- Deployment
- Workshops
- Conferences
- Demonstrations



The FHWA Resource Center

*Technical Assistance and
Technology Deployment
Reaching the Customer*

Bringing tomorrow's
solutions to today's
transportation needs



Thank You!

Comments?

Questions?